# UPPER SNAKE RIVER COOPERATIVE WEED MANAGEMENT AREA

# ANNUAL REPORT YEAR 2003



### I- INTRODUCTION

The Upper Snake River Cooperative Weed Management Area (USRCWMA) was established by the Bonneville, Teton, Madison, Jefferson and Bingham County Commissioners in partnership with the state and federal agencies that manage lands within those counties. The USRCWMA provides a forum to coordinate area wide activities to prevent, contain, and control non-native invasive plants and noxious weeds on public and private lands In the USRCWMA, we believe that sharing funds, equipment, staff, and ideas across jurisdictional boundaries in a coordinated and cooperative weed fighting strategy will result in more effective "on-the-ground" weed control. The USRCWMA focus is to support an area wide integrated noxious weed control program that uses all available tools and techniques to combat noxious weeds. A Cooperative Agreement describes the operations of the partnership and a steering committee provides the local leadership. The steering committee membership is detailed in Appendix 1. The committee met seven times during 2003.

The USRCWMA strategic plan, developed in 2000 and reconfirmed in 2003, places a high priority on:

- 1) Developing a coordinated area-wide information and education program.
- 2) Initiating a noxious weed-mapping program using GPS and GIS technology.
- 3) Targeting and funding large scale weed treatment initiatives and smaller projects.
- 4) Implementing a research and monitoring program to locally evaluate the effectiveness of weed fighting techniques.

The USRCWMA Steering Committee has identified and prioritized several noxious weed infestations that pose the highest threat to the entire USRCWMA. Eight major multi-year weed-fighting initiatives are underway in the USRCWMA. They include the Snake River Purple Loosestrife Initiative, Highway 33 Corridor Spotted Knapweed Initiative, Rexburg Bench Leafy Spurge Initiative, Menan Area Spurge/Knapweed Initiative, Palisades/Swan Valley Noxious Weed Initiative, Teton Area Leafy Spurge/Knapweed Initiative and the Palisades Mitigation Project. Additionally, there are several special projects underway which target specific local noxious weed concerns.

Partners in the USRCWMA include the Bonneville, Teton, Madison, Jefferson and Bingham County Commissions, private land owners, County Weed Departments, High Country RC&D Council, five Soil and Water Conservation Districts, private landowners, USDA-Forest Service; USDI-Bureau of Land Management, USDA-Natural Resources Conservation Service, USDA-Cooperative Extension Service, USDI-Bureau of Reclamation, Idaho Department of Lands, Idaho State Department of Agriculture, Idaho Department of Highways, Idaho Department of Fish & Game, Bonneville Power Administration, and Idaho National Engineering and Environmental Laboratory.

# Area involved

The USRCWMA covers Teton County, Madison County, Bonneville County, a portion of Jefferson County, and a portion of Bingham County.

Table 1: Acres - USRCWMA

COUNTY	Bonneville	Bingham	Jefferson	Madison	Teton	TOTAL
ACRES	1,211,405	113,000	363,761	306,000	294,012	2,288,178

## Major concerns

Leafy Spurge, Spotted Knapweed, Diffuse Knapweed, Russian Knapweed, Canada Thistle, Musk Thistle, Hoary Cress, Dalmation and Yellow Toadflax, Houndstounge, and Purple Loosestrife are the major concerns in the USRCWMA. The rapid spread of these noxious weeds is a serious threat to the ecology and economy of eastern Idaho.

Leafy spurge has gained a strong foothold in a wide range of habitats across the USRCWMA including arid rangelands, dry canyons, riparian zones, and wetland habitats along the Teton and Snake River. Leafy Spurge has displaced native vegetation and severely degraded the wildlife and grazing values of these lands. Purple Loosestrife threatens the diverse habitats along the Henry's Fork of the Snake River in Madison and Jefferson County. In recent years, Spotted Knapweed, Diffuse Knapweed, and Russian Knapweed have been spreading, especially along the regions road systems, and pose a threat to the regions rangelands.

# **II- WHAT'S BEING DONE**

Twenty-two projects were approved for ISDA funding during 2003. Agencies, counties, and landowners participated. Projects included information and education projects, land treatment projects, landowner cost share projects, mapping and inventory projects, and biological control projects. Some of the projects implemented during 2003 have been on-going for several years and are resulting in some very successful noxious weed treatments. Here's a sample of what's being done:

<u>Inventory / Mapping-</u> During the summer of 2003 the USRCWMA contracted with the Bingham County Solutions Program to inventory and map biological release sites. Beginning in 1993, several thousand release sites have been established through the Palisades Mitigation Project. Release sites in Madison and Jefferson County were inventoried for insect establishment, impact, and insectaries potential. GPS locations were established and GIS maps produced. Additionally, Solutions completed a noxious weed mapping project in Madison County. 3,100 acres were mapped and 10,000 acres were inventoried. Initial scouting of a Tamarisk infestation in the Teton River Canyon was completed by Idaho Fish and Game.

<u>Information/Education-</u> During 2003, the USRCWMA provided several public educational opportunities by participating in workshops, and developing printed materials. During March local residents attended the Jefferson County Weed Awareness Workshop in Rigby. 4, 200 copies of our very popular pocket calendar were produced. The Bonneville County Weed Supervisor participated monthly in a popular radio talk show discussing noxious weed issues. A USRCWMA / Legislative tour was also completed.

**Eradication.** - Two cooperative spray days were planned and implemented by the USRCWMA partners during 2003. They included the Highway 33 Corridor Spotted Knapweed Spray Day and the Pine Creek Leafy Spurge Spray Day. Cost share programs have been extremely effective in getting great cooperation with the landowners, especially with the fact that many of the landowners are 'absentee land owner'. Cost share programs were completed in Teton, Madison, Jefferson, and Bonneville County.

<u>Containment</u>- During 2003, the Palisades Mitigation Project (PMP) assisted our partners to implement the biological component of their integrated noxious weed control programs. A long-term goal of the PMP is to establish insectaries throughout the watershed on several species of noxious weeds. The PMP has established and administers a cost share program, developed its own project evaluation process, and continues to monitor release sites. During 2003, sixteen species of biological agents, (518 colonies) were released. Since 1994, the PMP has assisted partners within the USRCWMA to place thousands of colonies of plant specific biological control agents on Leafy Spurge, Spotted Knapweed, Canada Thistle, Musk Thistle, Purple Loosestrife, and Yellow Toadflax. The project cost-shares directly with landowners and agencies.

#### SUCCESS STORIES



**Swan Valley Project:** This is one of the largest and most comprehensive treatment projects in the USRCWMA. Landowner cooperation is very key to the success of this program and as time goes on we are getting more and more landowners involved. During 2003 Bonneville County Weed Department worked with over 50 different landowners controlling weeds on 990 acres of land.



<u>Dan Creek Project</u>: This project has successfully reduced Musk thistle and Canadian Thistle to a minimal presence. What use to take days to control patches of the weed, now only takes a few hours with backpack sprayers. Hounds tongue on the other hand has been a challenge. Without being able to predict or control the seed dispersal of the weed, we are having difficulty reducing its presence. This year we approached the project with 'containment in mind'. This year we controlled close to 150 acres, compared to last years 85 acres.



<u>Hudman Project</u> The main goal to this multi year project is to control noxious weeds to help protect IDF&Gs Tex Creek Wildlife Management Area. Target weeds are Musk thistle, Canada thistle, Black Henbane, and Hounds tongue. This year we also found a patch of Leafy spurge. The landowners, Idaho Fish and Game, INEEL, and the Bonneville County Weed Department joined forces this summer for a collaborative workday. 120 acres were treated, as compared to 90 acres last year. Musk thistle and Black henbane numbers have been decreasing, Canada thistle is maintaining, and Hounds tongue seems to be maintaining its population.



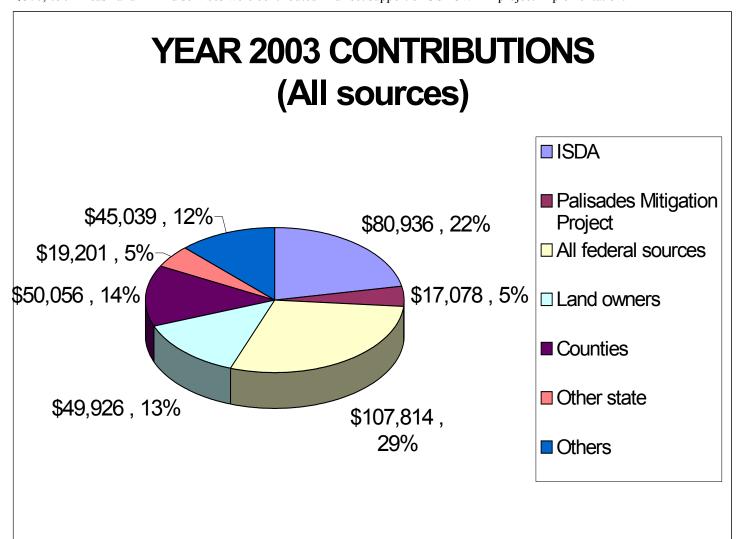
Eastern Idaho Railroad (Rail dogs:) Three years ago we implemented a joint agreement between the counties of Bonneville, Jefferson, Madison, and Fremont and the Eastern Idaho Railroad (Watco Company). In this agreement the railroad supplies a 'High-Rail Truck' (sprayer that can travel on the railroad tracks) with driver/applicator and each county would supply an applicator to assist with the application. We, the counties and Rail dogs, feel that this program is very effective in reducing the amount of noxious weeds. In previous years it took over a week to run all the tracks in the 4 county area. Now it only takes a couple of days to cover the same amount of area. Our main weeds are Canada thistle, Field bindweed, Leafy spurge, Russian and Spotted knapweed, and others. Eastern Idaho Railroad is trying to replicate export this program to other railways they own .

Leafy Spurge Control at Cartier Slough Wildlife Management Area (WMA) using Goat Grazing: Up to 600 goats were used to graze leafy spurge from early July through the end of September. In areas where there had been some grass mixed in with the leafy spurge initially, the grass cover is noticeably increased. There also appears to be a mutually beneficial interaction between the goat grazing and increases in biological control agents. Several areas of the WMA had good populations of leafy spurge flea beetles in areas where the goats are also grazing. A grass seed mix was broadcast in several spurge patches where there wasn't much competing vegetation and the goats were herded through these patches so their hooves could work the seed into the soil. The CWMA Tour visited this project in July, as did a BYU-Idaho agriculture class of nearly 20 students. A poster paper about this project was presented at the annual Society for Range Management meeting in Casper, Wyoming (attendance ~ 2,000).

<u>Forest Weed Control, Inventory and Mapping:</u> Seven seasonal and two Youth Conservation Corps employees were assigned to this project from the forest service. This crew participated in spray days for other projects as well as their own project. With the help of other members of the Upper Snake River CWMA, 2363 acres of weeds with in the reduced the amount of leafy spurge in Dry Canyon to a level that can be managed by a small crew. The Bureau of Reclamation contributed \$6000 for labor costs on this project. The BLM allowed the collection of 60,000 *apthona* beetles to be released in the project area. Other biological control agents were secured for this project through the Palisades Mitigation Project.

## **III- CONTRIBUTIONS TO THE CWMA**

Each county as well as state and federal land managing agency within the USRCWMA annually set budgets for integrated noxious weed control programs. Other USRCWMA partners provide technical assistance, equipment, services, and dollars in support of integrated noxious weed programs. Grant dollars received from the Idaho Department of Agriculture have been matched with local cash and services. Collectively, they provide the resources needed to implement the programs of the USRCWMA. During 2003, the USRCWMA received cash financial assistance for project implementation from several sources. (See Graph) During 2003, a total of \$370,050 in cash and in-kind services were contributed in direct support of USRCWMA project implementation.



#### V- PLANS FOR NEXT YEAR

The USRCWMA will continue to implement the strategic plan it developed in 2000 and reconfirmed in 2003. A high priority is placed on continuing those programs started in 2001, 2002, and 2003 while taking on several new challenges during 2004. Goals include:

- Coordinated noxious weed inventory and mapping will be a major activity during 2004. We are arranging for student mapping teams to assist county weed supervisor's to inventory and map noxious weeds and provide GIS maps.
- > GIS mapping of our biological agent release sites.
- > Targeted noxious weed treatment projects within the USRCWMA priority initiative areas will continue.
- ➤ Cooperative "spray days" will be continued.
- > The Palisades Mitigation Project will continue to plan, fund, and implement biological weed control projects in the USRCWMA.
- > Several insectaries will be harvested during 2004 and these insects will be moved to new sites.
- > The Leafy Spurge Control with Goat Grazing project on Henry's Fork of the Snake River will be continued.
- Educational outreach will continue to be a high priority in the USRCWMA during 2004. We will utilize workshops, tours, displays at county fairs, radio talk shows, newspapers, and newsletters to continue to provide quality information and educational opportunities to the public. We will produce a 2004 Noxious Weed Pocket Calendar.
- > We will focus on RAPID RESPONSE during 2004 by creating Rapid Response Booklets to train agency staff on new noxious weed threats.
- We will begin our new Tamarisk Initiative in 2004 starting with an inventory of the infestations boundaries, evaluating treatment options, and starting a public information campaign.

# APPENDIX 1

# **USRCWMA STEERING COMMITTEE**

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# **2003 PROJECT SUMMARIES**

		ACRES
PROJECT	<b>WEED SPECIES</b>	TREATED
Rexburg Bench Spurge	Ls	400
Forest weed control	m,ct,ls,yt,dt,bh,sk	2363
Willow Creek/Moody Creek	Ct	63
Highway 33 Knapweed	sk, ls	150
Swan Valley Project	sk, ls	993
Rail Dogs	ls, ct,mt,pp,hc	60
Henry Creek	Ls	13
Leafy Spurge Control with Goat Grazing	Ls	1000
Teton Area Spurge/ Knapweed	ls,sk	92
Purple Loosestrife	Pl	5
Dry/Pine Creek Spurge	Ls	15
Sand Creek Progressive Irrigation	Нс	23
Dan Creek/Kepps Crossing	ht,mt	292
Spotted Knapweed South of Driggs	sk	150
Hudman	ct,mt,bh,ht	23
Menan Leafy Spurge	Ls	500
Three reseeding projects	mt,htct	78
Fisher Bottoms	ls,ct,ht	218
Purple Loosestrife Bio Control	pl	5
Palisades Mitigation Project	ct,mt,sk,ls,yt	2575
TOTAL		14,660

# Weed species key

ht - Hounds tounge	ct - Canada thistle	ht - Hounds tounge	hc - Hoary cress	bh - Black henbane
pl - Purple Loosestrife	mt - Musk thistle	pl - Purple Loosestrife	pp - Perennial pepperweed	yt - Yellow toadflax

dt - Dalmation toadflax